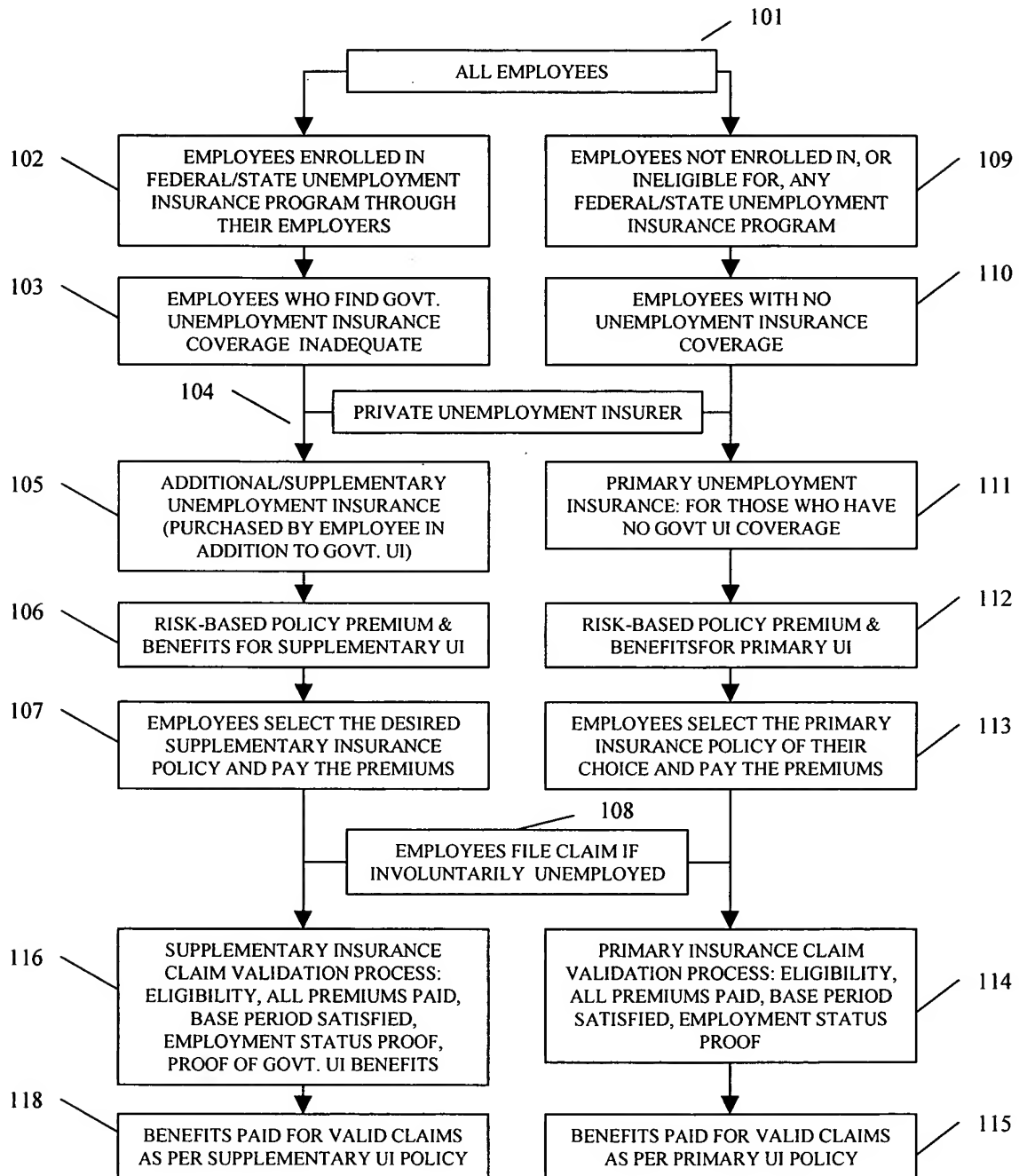


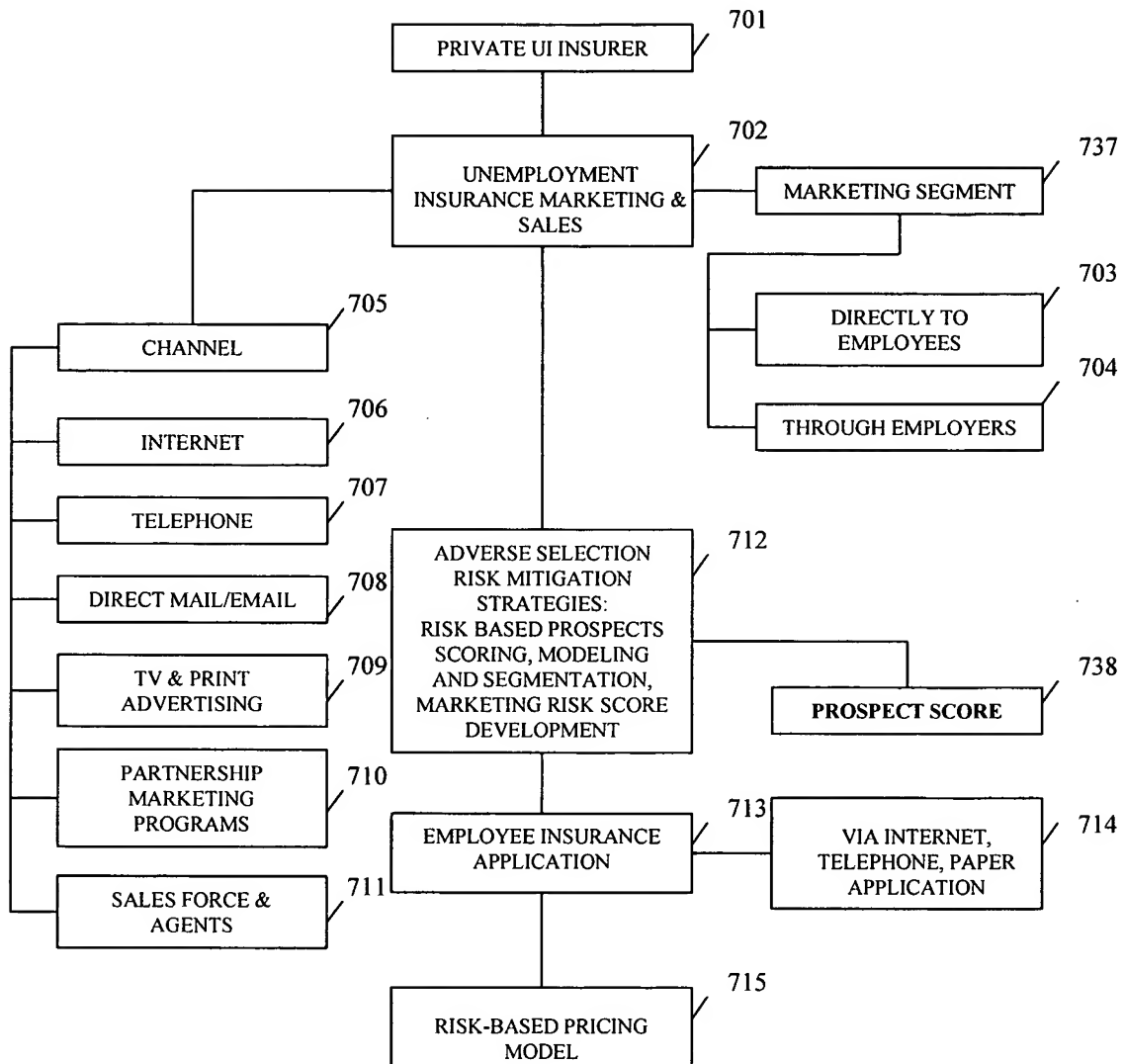
PRIVATE UNEMPLOYMENT INSURANCE: BLOCK DIAGRAM

Figure 1



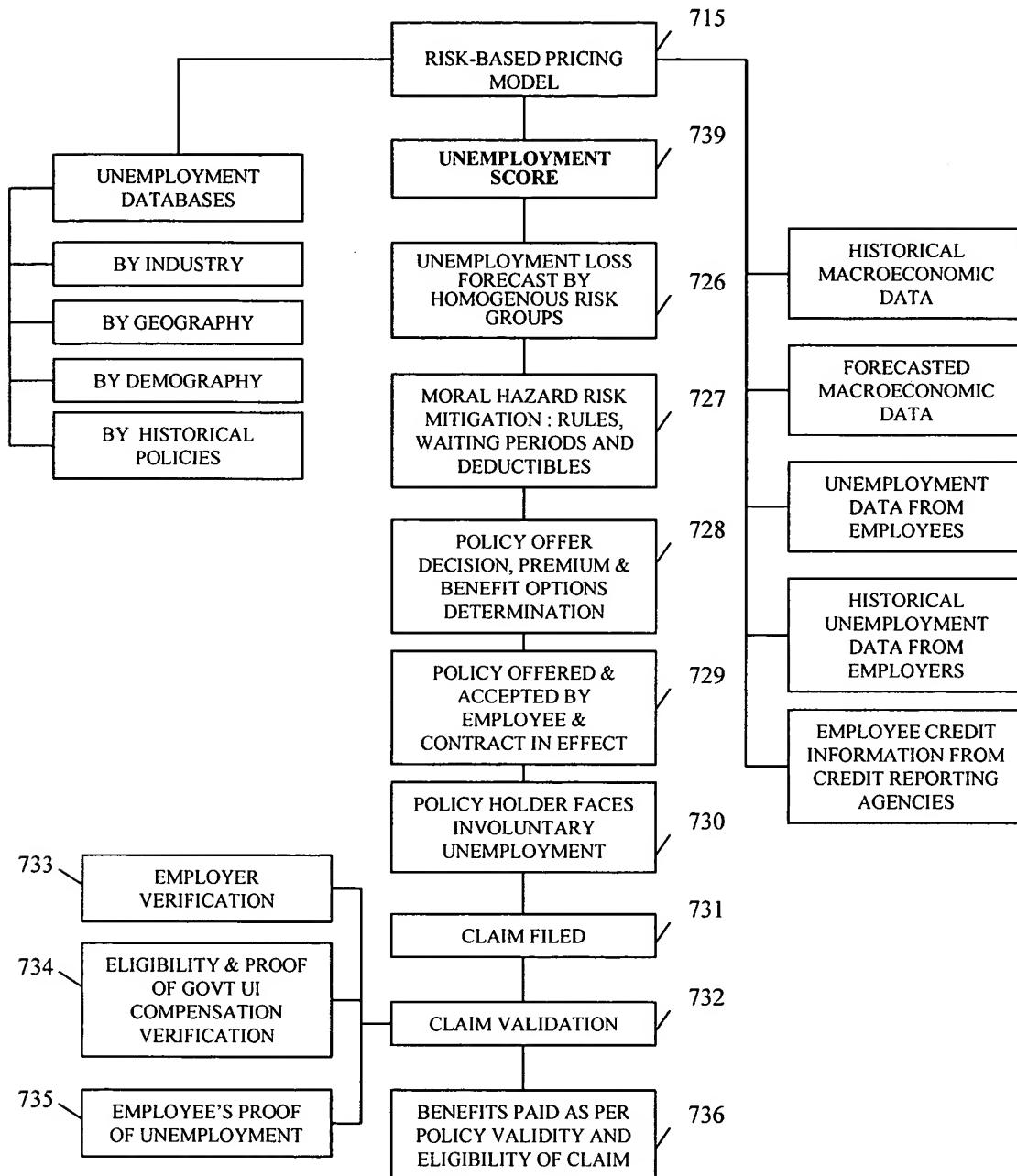
PRIVATE UNEMPLOYMENT INSURANCE: DETAILED MODEL

Figure 2A



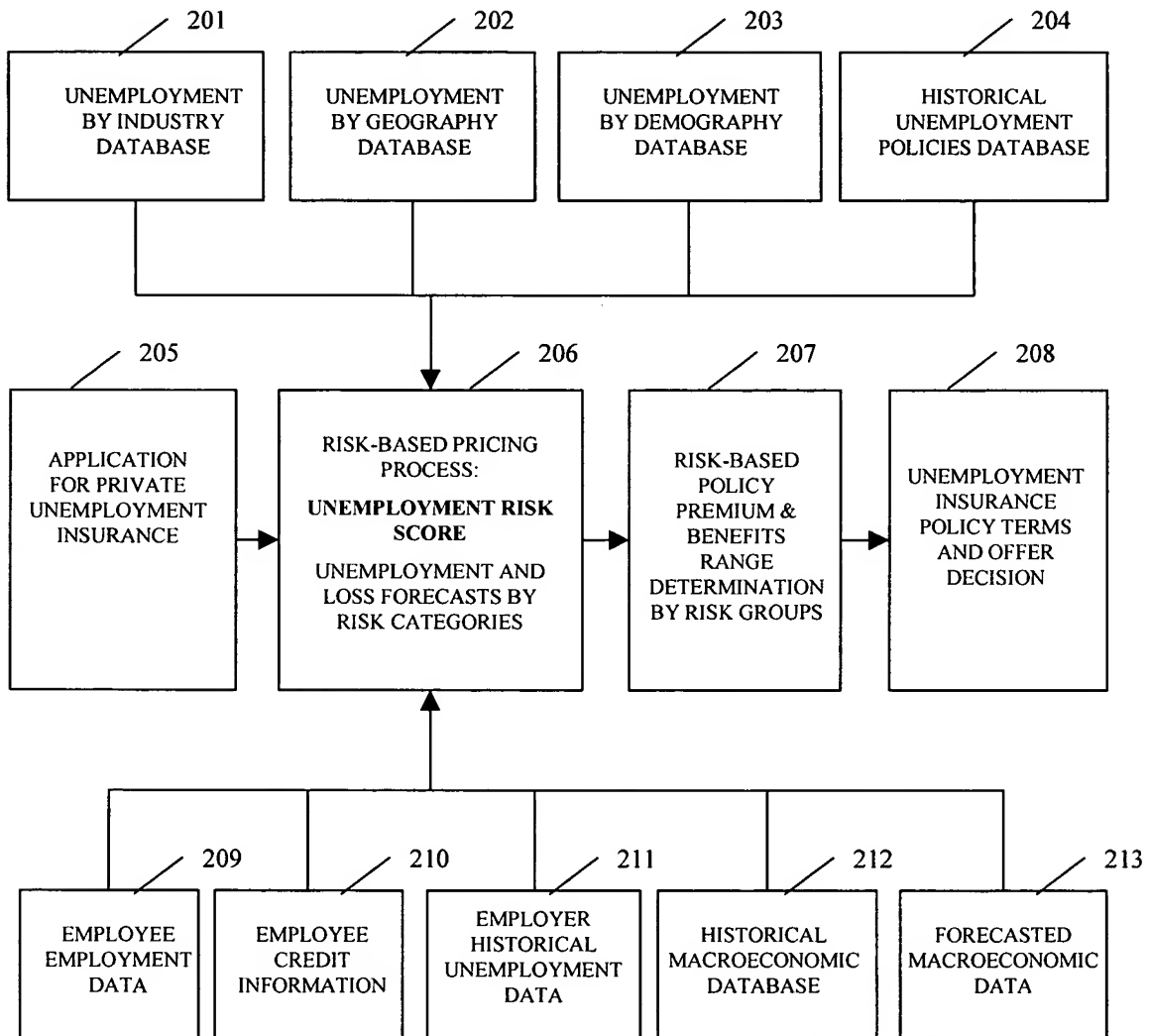
PRIVATE UNEMPLOYMENT INSURANCE: DETAILED MODEL

Figure 2B



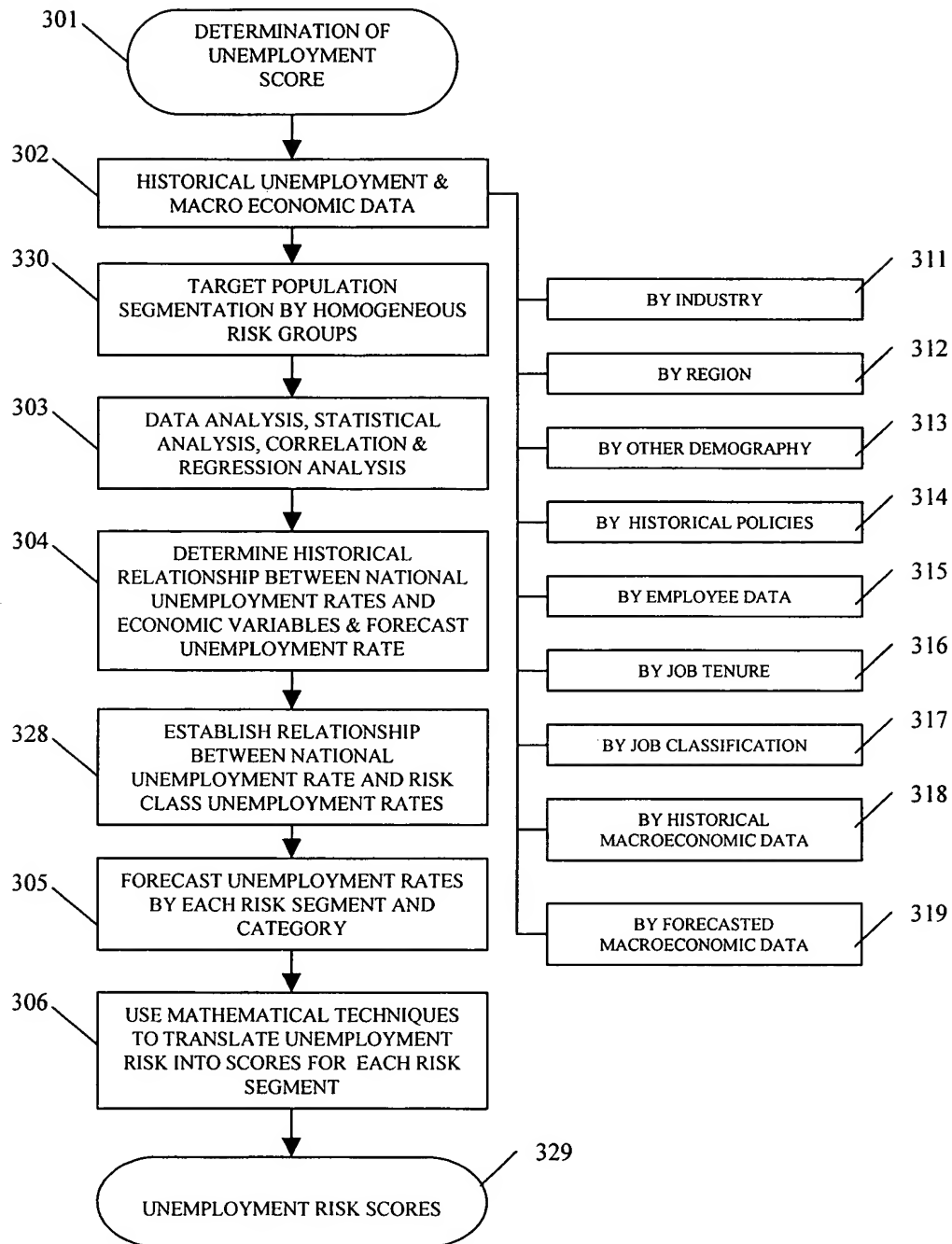
UNEMPLOYMENT SCORE & RISK-BASED PRICING BLOCK DIAGRAM

Figure 3



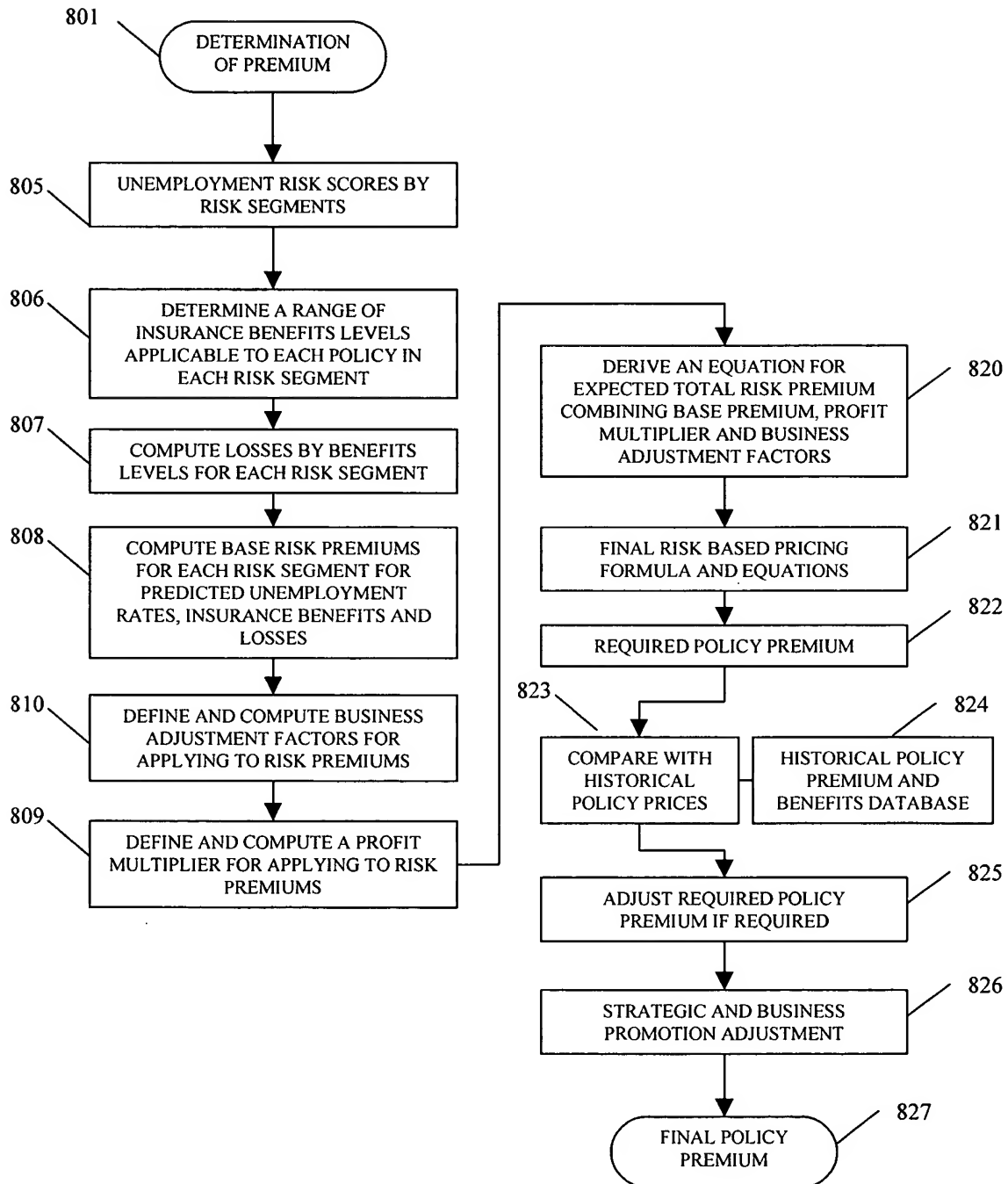
UNEMPLOYMENT RISK SCORE DETERMINATION

Figure 4A



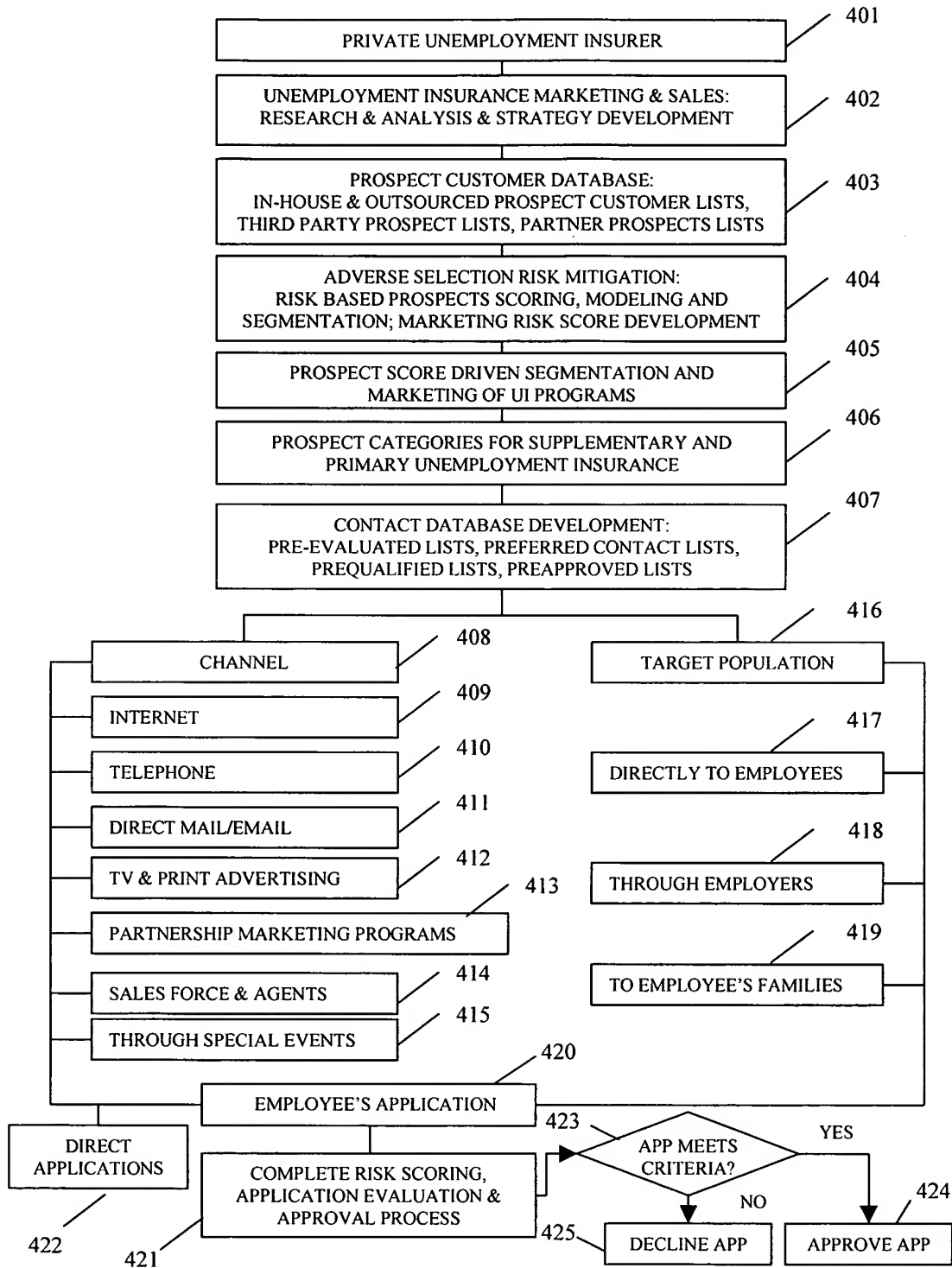
RISK BASED POLICY PRICING & PREMIUM DETERMINATION

Figure 4B



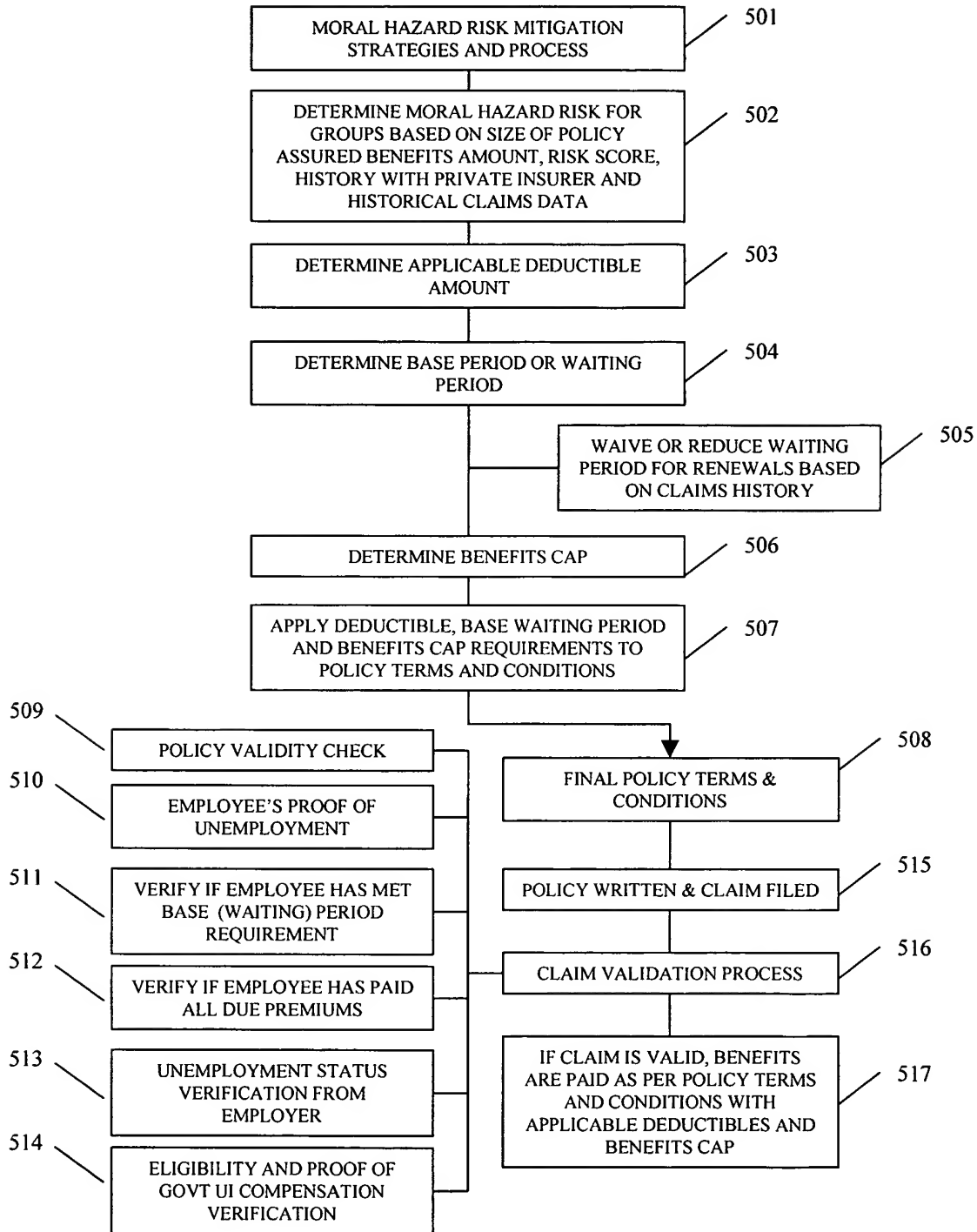
MARKETING AND SALES & ADVERSE SELECTION RISK MITIGATION

Figure 5



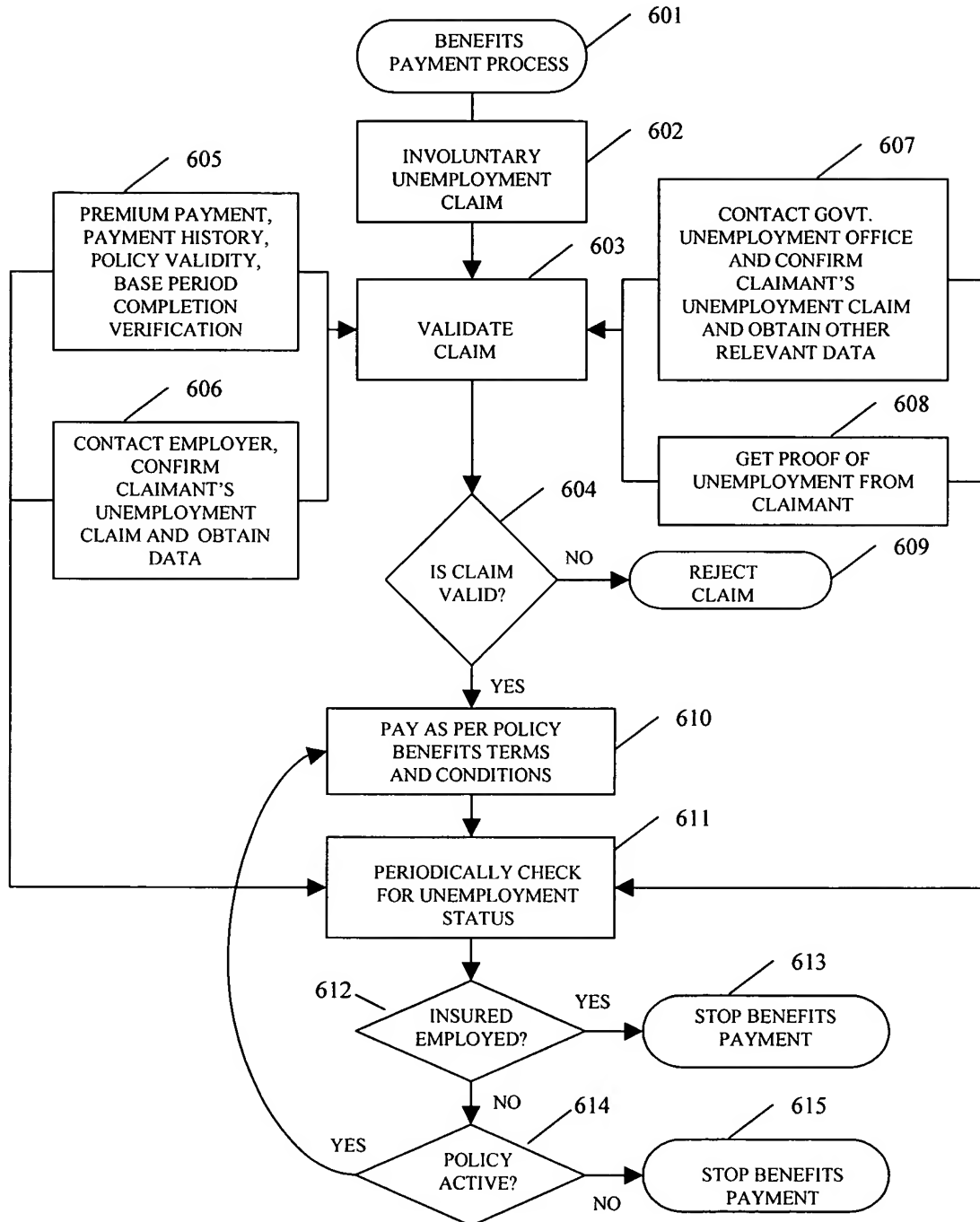
POLICY TERMS AND CONDITIONS DETERMINATION
& MORAL HAZARD RISK MITIGATION

Figure 6



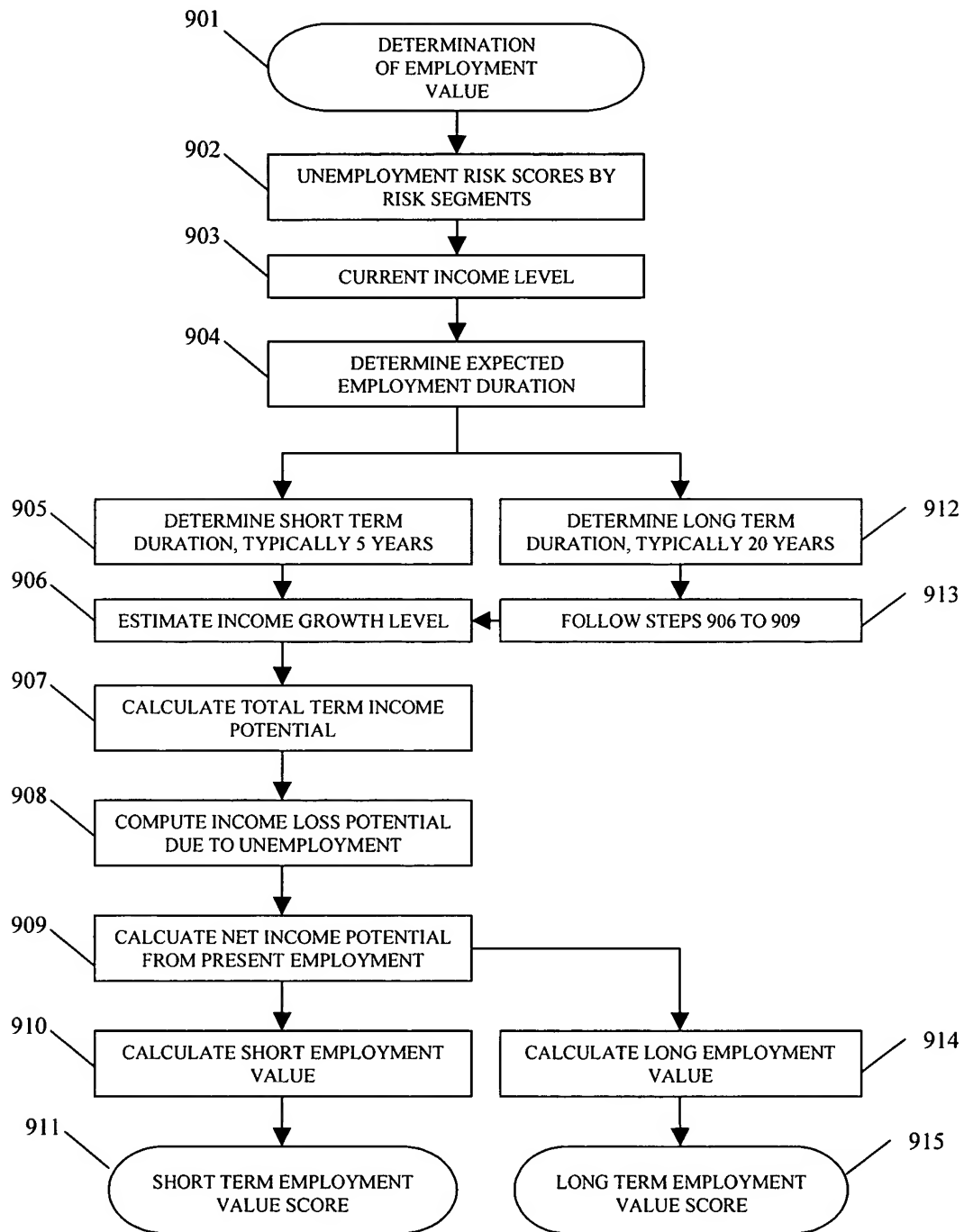
BENEFITS PAYMENT PROCESS

Figure 7



EMPLOYMENT VALUE SCORE DETERMINATION PROCESS

Figure 8



UNEMPLOYMENT INSURANCE RISK-CLASS VARIABLES

Figure 9

Unemployment Risk Class Categories & Variables*

Age**	State
Total, 16 years Total16 to 24 years. Total16 to 19 years. Total16 to 17 years. Total18 to 19 years. Total20 to 24 years. Total25 years and ov Total25 to 54 years. Total55 years and ov	GEORGIA GUAM HAWAII IDAHO ILLINOIS INDIANA IOWA KANSAS KENTUCKY LOUISIANA MAINE MARSHALL ISLANDS MARYLAND MASSACHUSETTS MICHIGAN MINNESOTA MISSISSIPPI MISSOURI MONTANA NEBRASKA NEVADA NEW HAMPSHIRE NEW JERSEY NEW MEXICO NEW YORK NORTH CAROLINA NORTH DAKOTA NORTHERN MARIANA ISLANDS OHIO OKLAHOMA OREGON PALAU PENNSYLVANIA PUERTO RICO RHODE ISLAND SOUTH CAROLINA SOUTH DAKOTA TENNESSEE TEXAS UTAH VERMONT VIRGIN ISLANDS VIRGINIA WASHINGTON WEST VIRGINIA WISCONSIN WYOMING
Occupation	
Managerial and professional specialty Technical, sales, and administrative support Precision production, craft, and repair Operators, fabricators, and laborers Farming, forestry, and fishing Other Occupation	
Race and Age**	
White men 20+ White women 20+ Black men 20+ Black women 20+ Hispanics Other Race	
Education	
Less than a high school diploma High school graduates, no college(2) Less than a bachelor's degree(3) College graduates Industry	
Occupation	
Construction Manufacturing Wholesale and retail trade Transportation and utilities Information Financial activities Professional and business services Education and health services Leisure and hospitality Agriculture and related private wage and salary workers Government workers Other Industry	
Gender & Age	
Men16 to 24 years. Men16 to 17 years. Men18 to 19 years. Men20 to 24 years. Men25 years and ov Men25 to 54 years. Men55 years and ov Women16 to 24 years. Women16 to 17 years. Women18 to 19 years. Women20 to 24 years. Women25 years and ov Women25 to 54 years. Women55 years and ov	
State	Region
ALABAMA ALASKA AMERICAN SAMOA ARIZONA ARKANSAS CALIFORNIA COLORADO CONNECTICUT DELAWARE DISTRICT OF COLUMBIA FEDERATED STATES OF MICRONESIA FLORIDA	Northeast South Midwest West
	Subregion
	New England Middle Atlantic South Atlantic East South Central West South Central East North Central West North Central Mountain Pacific

* These model variables for risk class determination are indicative of a preferred embodiment of this invention.

** Used only if legally permitted

UNEMPLOYMENT RATE FORECAST VARIABLES

Figure 10

Unemployment Rate Forecast Variables

CPI (Consumer price index)	Light vehicle sales
PPI (Producer price index)	Personal Income
GDP	Total consumer credit
Prime interest rate	Revolving credit
US Trade balance	Corporate profits
Retail sales	Consumer expenditure
30 Year Mortgage Rate	Personal savings rate
Housing Starts	Industry capacity utilization
Gold Prices	National industrial vacancy rates
Oil Prices	Govt spending
Industrial Prod. Index	S&L spending
M1 Money Supply	Corporate capital spending
Yen to US Dollar	Corporate debt
S&P 500	Personal Disposal Income
Labor force growth	Consumer confidence

UNEMPLOYMENT RISK CATEGORIES & RISK FACTORS

Figure 11

Unemployment Risk Categories

Selected Unemployment Categories

Category 1	Occupation	These 5 categories are selected because they are the most logical reasons for unemployment and their correlation with historical unemployment rates is found to be the highest. Using similar methodology, as shown in this invention, it is easily possible to substitute, include or exclude other categories, such as state, county, metropolitan area, cities, race, marital status, home ownership, etc., as per the business considerations and legal requirements.
Category 2	Education	
Category 3	Industry	
Category 4	Age & Sex	
Category 5	Region	

Unemployment Rate by Category Variables

Occupation	UE rate*	Education	UE rate	Industry	UE Rate	Age & Sex	UE rate	Region	UE rate
Managerial	3.1%	Below hi school	9.2%	Mining	5.4%	M; 16-24	12.7%	Northeast	5.3%
Sales Service	5.2%	High school	5.2%	Construction	8.5%	M;25+	5.1%	New Eng	4.5%
Skilled	6.4%	Below bachelor's	4.7%	Manufacturing	6.3%	F; 16-24	11.6%	Mid Atl	5.6%
Semi-skilled	8.8%	College	2.9%	Wholesale Retail	6.2%	F;25+	4.4%	South	5.2%
Farming	7.4%			Trnsprt Utilities	4.2%			S Atl	4.9%
Other	6.0%			Information	6.6%			E S Central	5.1%
				Financial	3.7%			W S Central	5.7%
				Prof svcs	8.2%			Midwest	4.9%
				Edu Hlth svcs	2.8%			E N Central	5.4%
				Leisure and hosp	8.9%			W N Central	4.0%
				Agri	11.1%			West	6.1%
				Govt	2.3%			Mountain	5.2%
				Other	6.0%			Pacific	6.4%

US National Average for Unemployment Rate **6.00%**

Unemployment Risk Factors by Category Variables

Occupation	Risk Factor	Education	Risk Factor	Industry	Risk Factor	Age & Sex	Risk Factor	Region	Risk Factor
Managerial	0.52	Below hi school	1.53	Mining	0.90	M; 16-24	2.12	Northeast	0.88
Sales Service	0.87	High school	0.87	Construction	1.42	M;25+	0.85	New Eng	0.75
Skilled	1.07	Below bachelor's	0.78	Manufacturing	1.05	F; 16-24	1.93	Mid Atl	0.93
Semi-skilled	1.47	College	0.48	Wholesale Retail	1.03	F;25+	0.73	South	0.87
Farming	1.23			Trnsprt Utilities	0.70			S Atl	0.82
Other	1.00			Information	1.10			E S Central	0.85
				Financial	0.62			W S Central	0.95
				Prof svcs	1.37			Midwest	0.82
				Edu Hlth svcs	0.47			E N Central	0.90
				Leisure and hosp	1.48			W N Central	0.67
				Agri	1.85			West	1.02
				Govt	0.38			Mountain	0.87
				Other	1.00			Pacific	1.07

US National Average for Unemployment Risk Factors **1.00**

Note: All data used here is for indicative purposes only and may not be factual.
 UE Rate = Unemployment Rate (%)
 Unemployment Risk Factor values are computed by dividing risk variable's individual UE Rate with National UE rate.

UNEMPLOYMENT FORECAST FOR INDIVIDUAL RISK CLASSES

Figure 12

Unemployment Risk & Rate Estimation by Homogenous Risk Classes

4 CLASS VARIABLES AND RISK FACTORS

Occupation	Risk Factor	Education	Risk Factor	Industry	Risk Factor	Region	Risk Factor
Managerial	0.52	Below hi school	1.53	Mining	0.90	Northeast	0.88
Sales Service	0.87	High school	0.87	Construction	1.42	New Eng	0.75
Skilled	1.07	Below bachelor's	0.78	Manufacturing	1.05	Mid Atl	0.93
Semi-skilled	1.47	College	0.48	Wholesale Retail	1.03	South	0.87
Farming	1.23			Trnsprt Utilities	0.70	S Atl	0.82
Other	1.00			Information	1.10	E S Central	0.85
				Financial	0.62	W S Central	0.95
				Prof svcs	1.37	Midwest	0.82
				Edu Hlth svcs	0.47	E N Central	0.90
				Leisure and hosp	1.48	W N Central	0.67
				Agri	1.85	West	1.02
				Govt	0.38	Mountain	0.87
				Other	1.00	Pacific	1.07

VARIABLES PER CATEGORY

OCCUPATION	6	EDUCATION	4	INDUSTRY	13	REGION	13
Total number of classes		4,056		Total US labor force is divided into 4,056 homogenous groups where each class consists of 35,750 workers who share similar attributes and form a homogenous group.			
Total US labor force		145,000,000					
Avg class size		35,750					

RISK FACTORS BY CLASS VARIABLES FOR EACH CATEGORY

Each homogenous unemployment insurance class is selected by choosing one applicable variable from each category.

For example, all workers over 25 years with high school education in a semi-skilled job in the construction industry in Midwest would form one class. So, unemployment risk factors for this specific class would be as follows:

Unemployment Forecast by selected Risk Classes

Risk factors for variables for example 1

Semi-skilled	1.47	High school	0.87	Construction	1.42	Midwest	0.82
--------------	------	-------------	------	--------------	------	---------	------

Class Example 1:

Class categories	(OCCUPATION) (EDUCATION) (INDUSTRY) (REGION)
Class selection	(Semi-skilled) (High school) (Construction) (Midwest)
Selected Class Risk Factor	1.47
Selected Class UR	8.80%

Class Example 2:

Class categories	(OCCUPATION) (EDUCATION) (INDUSTRY) (REGION)
Class selection	(Managerial) (College) (Financial) (Northeast)
Selected Class Risk Factor	0.88
Selected Class UR	5.30%

Class Example 3:

Class categories	(OCCUPATION) (EDUCATION) (INDUSTRY) (REGION)
Class selection	(Farming) (Below hi school) (Agri) (Pacific)
Selected Class Risk Factor	1.85
Selected Class UR	11.10%

As can be seen from above examples, unemployment risk and unemployment rate estimates can be calculated for all 35,750 groups. Essentially, each worker in the labor force would belong to one of these 35,750 classes for which this invention allows a risk factor to be forecasted which in turn forecasts unemployment rate.

Note: All data used here is for indicative purposes only and may not be factual.

UNEMPLOYMENT FORECAST FOR INDIVIDUAL RISK CLASSES

Figure 13

Unemployment Risk & Rate Estimation by Homogenous Risk Classes

5 CLASS CATEGORIES & ITS VARIABLES

Occupation	Risk Factor	Education	Risk Factor	Industry	Risk Factor	Age & Sex	Risk Factor	Region	Risk Factor
Managerial	0.52	Below hi school	1.53	Mining	0.90	M; 16-24	2.12	Northeast	0.88
Sales Service	0.87	High school	0.87	Construction	1.42	M;25+	0.85	New Eng	0.75
Skilled	1.07	Below bachelor's	0.78	Manufacturing	1.05	F; 16-24	1.93	Mid Atl	0.93
Semi-skilled	1.47	College	0.48	Wholesale Retail	1.03	F;25+	0.73	South	0.87
Farming	1.23			Trnsprt Utilities	0.70			S Atl	0.82
Other	1.00			Information	1.10			E S Central	0.85
				Financial	0.62			W S Central	0.95
				Prof svcs	1.37			Midwest	0.82
				Edu Hlth svcs	0.47			E N Central	0.90
				Leisure and hosp	1.48			W N Central	0.67
				Agri	1.85			West	1.02
				Govt	0.38			Mountain	0.87
				Other	1.00			Pacific	1.07

VARIABLES PER CATEGORY

OCCUPATION	6	EDUCATION	4	INDUSTRY	13	AGE & SEX	4	REGION	13
Total number of classes		16,224							
Total US labor force		145,000,000							
Avg class size		8,937							

Total US labor force is divided into 16,224 homogenous groups where each class consists of 8,937 workers who share similar attributes and form a homogenous group.

RISK FACTORS BY CLASS VARIABLES FOR EACH CATEGORY

Each homogenous unemployment insurance class is selected by choosing one applicable variable from each category.

For example, all workers over 25 years with high school education in a semi-skilled job in the construction industry in Midwest would form one class. So, unemployment risk factors for this specific class would be as follows:

Class Example 1: Risk classes and its associated risk factor

Semi-skilled	1.47	High school	0.87	Construction	1.42	M;25+	0.85	Midwest	0.82
--------------	------	-------------	------	--------------	------	-------	------	---------	------

Class Example 1:

Class categories	(OCCUPATION) (EDUCATION) (INDUSTRY) (AGE & SEX) (REGION)
Class selection	(Semi-skilled) (High school) (Construction) (M;25+) (Midwest)
Selected Class Risk Factor	1.08
Selected Class UR	6.50%

Class Example 2:

Class categories	(OCCUPATION) (EDUCATION) (INDUSTRY) (AGE & SEX) (REGION)
Class selection	(Managerial) (College) (Financial) (M;25+) (Northeast)
Selected Class Risk Factor	0.67
Selected Class UR	4.02%

Class Example 3:

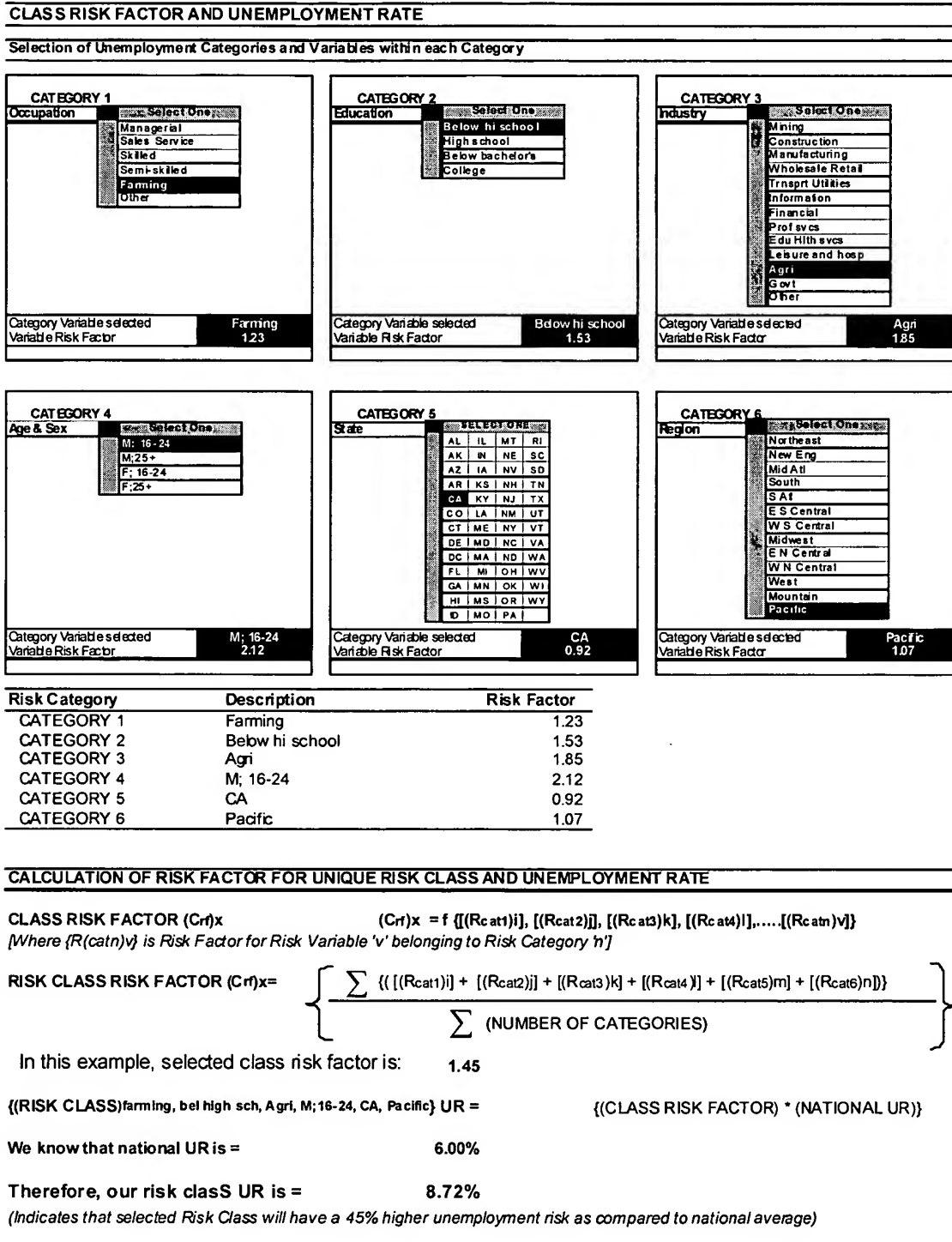
Class categories	(OCCUPATION) (EDUCATION) (INDUSTRY) (AGE & SEX) (REGION)
Class selection	(Farming) (Below hi school) (Agri) (M; 16-24) (Pacific)
Selected Class Risk Factor	1.56
Selected Class UR	9.36%

As can be seen from above examples, unemployment risk and unemployment rate estimates can be calculated for all 16,244 groups. Essentially, each worker in the labor force would belong to one of these 16,244 classes for which this invention allows a risk to be assigned and unemployment rate forecast possible. This invention allows the private unemployment insurer to vary the class definition, size and number to achieve a desired optimum class grouping suited to business needs, legal requirements, market opportunity and data availability.

Note: All data used here is for indicative purposes only and may not be factual.

UNEMPLOYMENT FORECAST FOR INDIVIDUAL RISK CLASSES

Figure 14



UNEMPLOYMENT RISK SCORES

Figure 15

Unemployment Risk Scores

Based on selected risk classes

All figures are for illustration of a method of computing unemployment risk scores and are not actuals.
Other similar techniques constitute part of this invention.

Unemployment Rate Assumptions:

National unemployment rate	6.0%
Maximum unemployment rate among all risk variables	9.0%
Minimum unemployment rate among all risk variables	3.0%

Further assumptions:

Unemployment rates above 9% would be treated as 9%
Unemployment rates below 3% would be treated as 3%

Conversion scale for converting forecasted unemployment risk factors into unemployment scores

Risk Class Unemployment rate	Risk Class Unemployment Score
2.0%	900
2.5%	900
3.0%	900
3.5%	850
4.0%	800
4.5%	750
5.0%	700
5.5%	650
6.0%	600
6.5%	550
7.0%	500
7.5%	450
8.0%	400
8.5%	350
9.0%	300
9.5%	300
10.0%	300
10.5%	300
11.0%	300
11.5%	300
12.0%	300

Note: Higher unemployment score indicates lower unemployment risk.

SHORT TERM & LONG TERM EMPLOYMENT VALUE SCORES

Figure 16

Employment Value Score

Following is to illustrate the concept and data may not be factual.

Employment profile

Risk Item/Data	Employment profile A	Short term employment value (5 years)	Long term employment value (20 years)
OCCUPATION	Farming		
EDUCATION	Below hi school		
INDUSTRY	Agri		
AGE & SEX	M; 16-24		
REGION	Pacific		
Unemployment or employment security score	300		
Current income level	\$30,000		
Expected income growth rate per annum		2.00%	2.20%
Total income potential		\$159,244	\$759,975
Income risk due to unemployment risk		\$19,675	\$93,896
Expected years of similar employment		5	20
Total employment value		\$139,569	\$666,079
Profile A Employment Value Score		186	222

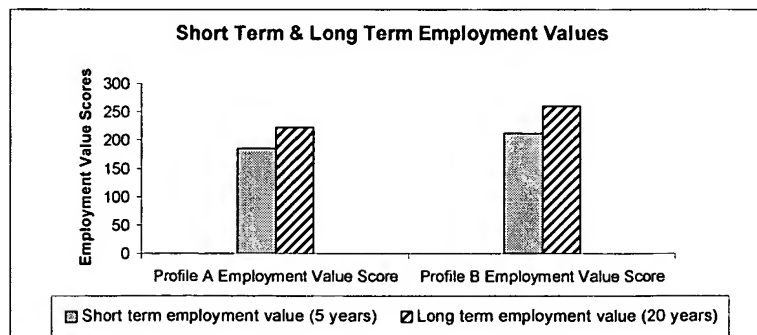
New employment profile

Risk Item/Data	Employment profile B	Short term employment value (5 years)	Long term employment value (20 years)
OCCUPATION	Skilled		
EDUCATION	Below hi school		
INDUSTRY	Mining		
AGE & SEX	M; 16-24		
REGION	Pacific		
Unemployment or employment security score	400		
Current income level	\$34,000		
Expected income growth rate per annum		2.20%	2.50%
Total income potential		\$181,555	\$890,231
Income risk due to unemployment risk		\$22,431	\$109,990
Expected years of similar employment		5	20
Total employment value		\$159,123	\$780,241
Profile B Employment Value Score		212	260

New profile with changes in industry and occupation results in an increase (decrease) in income potential of:

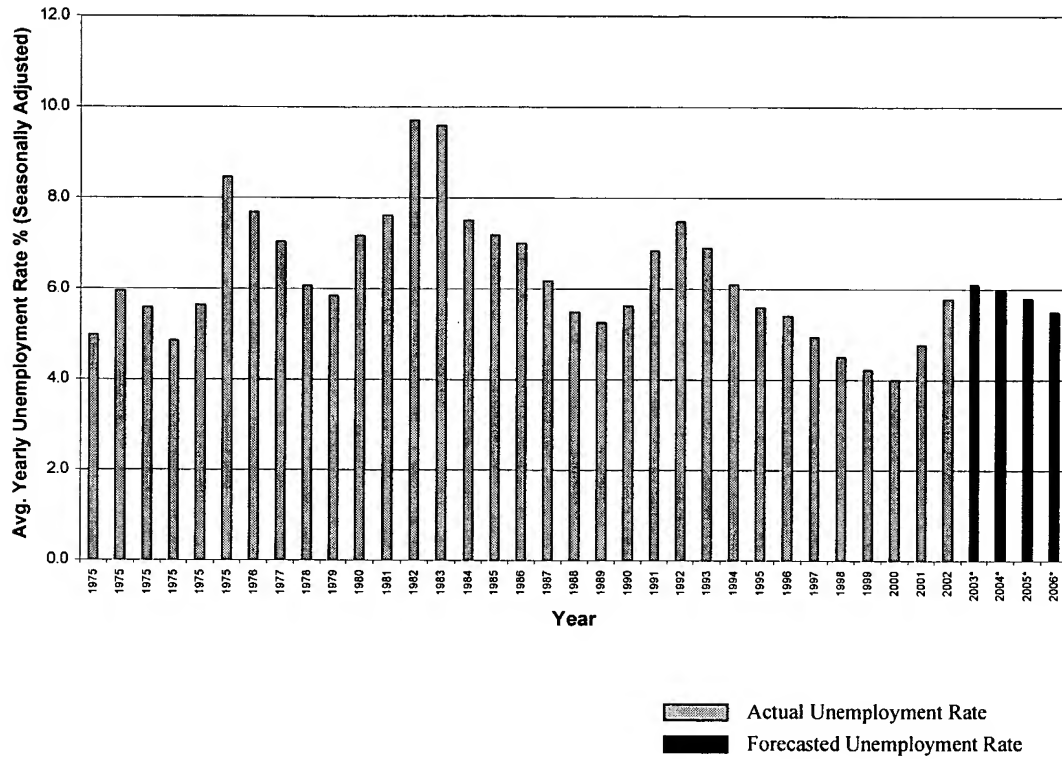
14.0%

17.1%



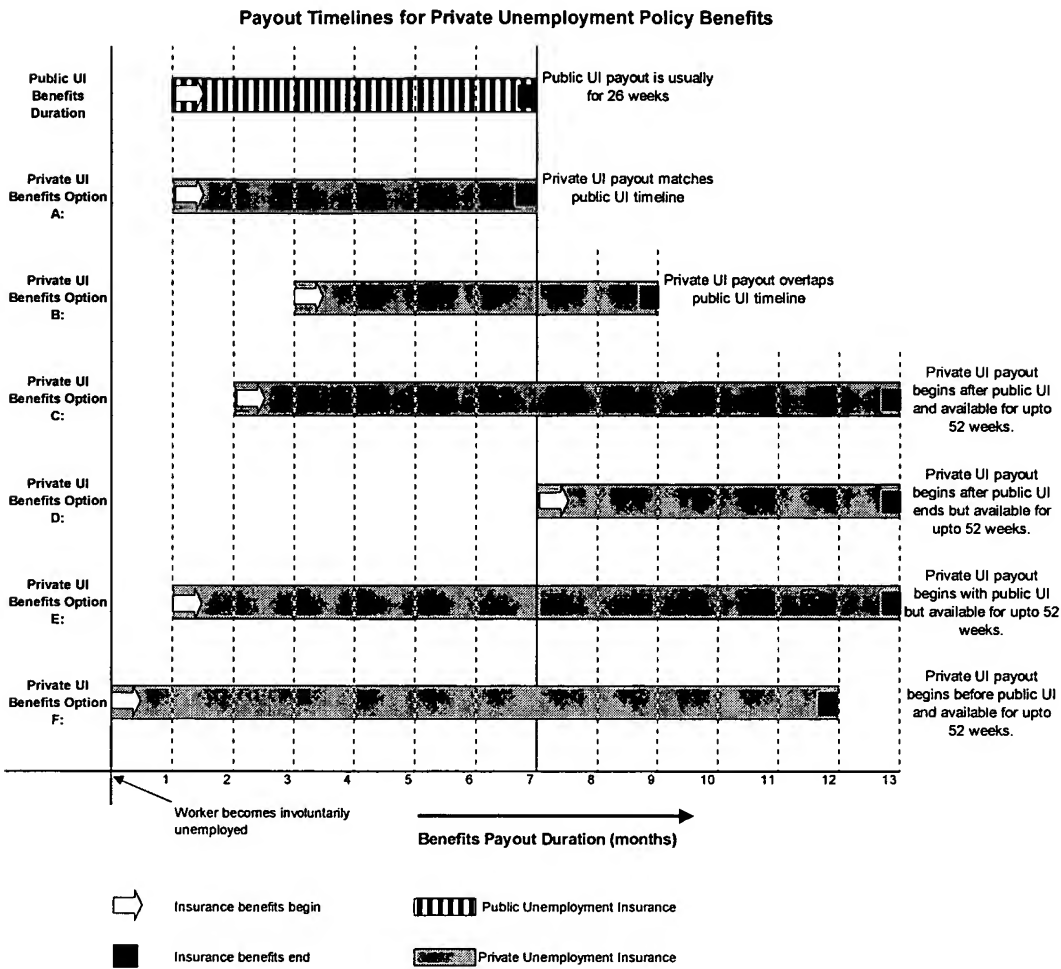
UNEMPLOYMENT RATE ACTUALS & FORECAST
Figure 17

U.S. Actual and Forecasted Unemployment Rate



PRIVATE UNEMPLOYMENT POLICY BENEFITS TIMELINES

Figure 18



Note:

Public unemployment insurance benefits are typically available for a maximum of 26 weeks.

This invention intends to provide private unemployment benefits for up to 52 weeks under a range of worker selected options.

Public UI Benefits Duration	Public UI payout is usually for 26 weeks
Private UI Benefits Option A:	Private UI payout matches public UI timeline
Private UI Benefits Option B:	Private UI payout overlaps public UI timeline
Private UI Benefits Option C:	Private UI payout begins after public UI and available for upto 52 weeks.
Private UI Benefits Option D:	Private UI payout begins after public UI ends but available for upto 52 weeks.

PREMIUM CALCULATION METHODOLOGY

Figure 19

CLASS POLICY PREMIUM CALCULATION

For employees belonging to a risk class which has an unemployment risk score of 550 and where average insurance claim is \$1,000.00 per month for 6 months.

PREMIUM INFLUENCING FACTORS	Policy Premium per. Month	
BASE EXPECTED UNEMPLOYMENT RATE	6.00%	
SELECTED CLASS UNEMPLOYMENT RISK SCORE	550	
SELECTED CLASS EXPECTED UNEMPLOYMENT RATE	6.50%	
ADJUSTMENT FOR ADVERSE SELECTION RISK	1.08	
BASE LOSS RATE	7.02%	
AVERAGE BENEFITS PAYOUT (@ \$1000 P.M. FOR 6 MONTHS)	\$6,000	
BASE PREMIUM		\$35.10
BUSINESS OPERATIONS ADJUSTMENT FACTOR	1.225	\$43.00
PROFIT MULTIPLIER	1.08	
TOTAL POLICY PREMIUM		\$46.44
HISTORICAL PREMIUM COMPARISON ADJUSTMENT	0.95	\$44.12
SPECIAL PROMOTIONAL ADJUSTMENT	0.98	
FINAL POLICY PREMIUM		\$43.23

BASE POLICY PREMIUM CALCULATION

Figure 20

Monthly Base Policy Premium

Calculated for Various Compensation Amounts and Durations.

Months of Unemployment Compensation Desired (For policy coverage period of 1 year, compensation only if unemployed)					
	3	6	9	12	
Desired Compensation Amount p.m.	\$ 500	\$ 7.50	\$ 15.00	\$ 22.50	\$ 30.00
	\$ 750	\$ 11.25	\$ 22.50	\$ 33.75	\$ 45.00
	\$ 1,000	\$ 15.00	\$ 30.00	\$ 45.00	\$ 60.00
	\$ 1,250	\$ 18.75	\$ 37.50	\$ 56.25	\$ 75.00
	\$ 1,500	\$ 22.50	\$ 45.00	\$ 67.50	\$ 90.00
	\$ 1,750	\$ 26.25	\$ 52.50	\$ 78.75	\$ 105.00
	\$ 2,000	\$ 30.00	\$ 60.00	\$ 90.00	\$ 120.00
	\$ 2,250	\$ 33.75	\$ 67.50	\$ 101.25	\$ 135.00
	\$ 2,500	\$ 37.50	\$ 75.00	\$ 112.50	\$ 150.00
	\$ 2,750	\$ 41.25	\$ 82.50	\$ 123.75	\$ 165.00
	\$ 3,000	\$ 45.00	\$ 90.00	\$ 135.00	\$ 180.00

Note: Above base unemployment policy premium calculation is for illustration only.
A claim rate of 6% is assumed for this example.
Actual premium calculation would also depend on expected unemployment duration

Explanation:

From the above table it can be seen that if a worker chooses to receive unemployment compensation payment of \$1000 per month for a maximum duration of 6 months, payable in case of involuntary unemployment anytime during the policy coverage period of 1 year, then his/her base policy premium would be \$30 p.m. However, if the individual opts for lower compensation amount of \$750 p.m. for 3 months then the base policy premium reduces to just \$11.25 per month.